REMARKS

This response is intended as a full and complete response to the non-final Office Action mailed February 17, 2005. In the Office Action, the Examiner notes that claims 2-5 and 7-9 are pending and rejected. By this response, all claims continue unamended and arguments refuting the Examiner's position are provided. In view of the following discussion, the Applicants submit that none of the claims now pending in the application are anticipated or obvious under the respective provisions of 35 U.S.C. §102 and §103.

It is to be understood that the Applicants, do not acquiesce to the Examiner's characterizations of the art of record or to the Applicants' subject matter recited in the pending claims. Further, the Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant Response.

REJECTIONS

Rejections of claims under 35 U.S.C. § 102

The Examiner has rejected claims 2, 3-5 and 7 under 35 U.S.C. §102(e) as being anticipated by Kronz U.S. Patent No. 6,577,610 (hereinafter "Kronz"). The Applicants respectfully traverse the Examiner's rejection.

The Applicants' independent claim 2 recites (independent claims 3, 5 and 7 recite similar limitations):

> "A method for use in a transmitter, the method comprising the steps of:
>
> using a downlink channel from the transmitter to convey information to a group of devices; and
>
> load balancing the downlink channel; wherein the downlink channel comprises a sequence of dwells, each dwell having a time period, and wherein the method further comprises the step of detecting that at least one dwell of the sequence conveys more downlink information than the other dwells of the sequence as a prerequisite to performing the load balancing step."

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim" (Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)) (emphasis added).

The Kronz reference fails to disclose each and every element of the claimed invention, as arranged in the claim. Specifically, the Examiner is citing a new portion of Kronz (Col. 8, lines 45-67) in an attempt to prove that the reference includes the claimed feature of detecting an imbalance such that some time slots or dwells (of a single channel) convey more data than other time slots or dwells and a subsequent load balancing (within the single channel) occurs. It is respectfully submitted that the Examiner's interpretation of the reference is incorrect. The cited portion of the reference specifically discusses how information is transmitted through the network based on reassignment of communication terminals from a first channel to a second channel (Col 8, 52-54). The opening sentence of the Examiner cited portion at Col 8, 41-42 even says that the communication network of Kronz operates with a plurality of slotted channels. The dynamic load balancing disclosed in the cited portion of Kronz discloses inter-channel load balancing NOT intra-channel balancing. This is the very same shortcoming of the previously cited reference Enns. That is, each of these references disclose a load balancing method that entails moving data to a new channel rather than detecting the load imbalance amongst the slots (dwells) of a single channel as claimed.

The Examiner further attempts to equate the word "channel" of the claims with a "channel" as allegedly established in the art to show the necessary teaching. More specifically, the Examiner offers that the slotted aloha system is a form of TDMA and that a TDMA frame is divided into time slots. Each slot is allegedly known and understood to be a "channel" to transmit information. Thus the Examiner concludes that the allegedly known slots are channels and read

upon the claimed "channel". In response, it is offered that the Examiner's analysis is improper because the specific construction of the slotted aloha protocol is presented in the reference and does not coincide with the offered explanation. Specifically, at Col. 4, lines 7-30 of Kronz, it is stated that the protocol divides a communication channel into a series of time cycles 310. These cycles are further divided into a series of time slices 320. A data transmission 340 is initiated at one of these time slices 320. Accordingly, the reference has already established a definition and interpretation of the term "channel" as having a series of "time slices" (or slots or dwells). The Examiner is attempting to expand the language of the reference to fit the claim by forcing the term "channel" to also mean "slot" or "dwell". Such interpretation does not result in a clear teaching by the reference as required, but rather confuses the issue.

As stated earlier in the prosecution history, one skilled in the art realizes that moving between time slots of a single channel is distinctly different from moving from a first channel to a different channel in a larger transmission medium. Kronz discloses that information within this larger transmission medium may jump from one channel to another; however, this is not the same as moving or balancing information between timeslots of a single channel. Therefore, Kronz still does not disclose the elements of the claimed invention.

As such, the Applicants submit that independent claims 2, 3, 5 and 7 are not anticipated and fully satisfy the requirements of 35 U.S.C. §102 and are patentable thereunder. Furthermore, claim 4 depends directly from independent claim 3 and recites additional limitations thereof. As such and at least for the same reasons as discussed above, the Applicants submit that dependent claim 3 is also not anticipated and fully satisfies the requirements of 35 U.S.C. §102 and is patentable thereunder. Therefore, the Applicants respectfully request that the Examiner's rejection be withdrawn.

Rejection of Claims under 35 U.S.C. § 103

The Examiner has rejected claims 8 and 9 under 35 U.S.C. §103 as being unpatentable over Kronz in view of "a cellular wireless local area network with QoS Guarantees for Heterogeneous Traffic," Choi et al. (hereinafter "Choi"), 1997. The Applicants respectfully traverse the Examiner's rejection.

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added).

The Kronz and Choi references alone and in combination fail to teach or suggest the Applicants' invention as a whole. It has been above argued and presented that Kronz does not form the basis for an adequate rejection under the anticipation statute in that it does not disclose adequate teachings of downlink/downstream channel load balancing as claimed. Rather, it provides for inter-channel distribution of overload data to solve the problem of collision during data transmission. Any attempted combination of Kronz with Official Notice or a secondary reference results in a method and apparatus that monitors and/or moves information between different channels; therefore, the combination will not work or perform the tasks intended by the subject invention. Applicant's previous presentation of the basic criteria to establish the *prima facie* case of obviousness are on record in at least Pages 10-11 of the March 24, 2004 Response and is still valid. That is, without at least a reasonable expectation of success of the combination of Kronz and Choi, there is an insubstantial motivation to combine. Since Choi does not fill the gap in the teachings of Kronz, it is respectfully submitted that the combination still does not result in load balancing as claimed.

As such, the Applicants submit that independent claims 8 and 9 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable

thereunder. Therefore, the Applicants respectfully request that the Examiner's rejection be withdrawn.

SECONDARY REFERENCES

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to the Applicants' disclosure than the primary references cited in the Office Action. Therefore, the Applicants believe that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

CONCLUSION

Thus, the Applicants submit that none of the claims presently in the application are anticipated or obvious under the respective provisions of 35 U.S.C. §102 and §103. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

4/4/05

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